

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

KOSS CORPORATION,

Plaintiff,

v.

APPLE INC.,

Defendant.

Case No. 6:20-cv-00665-ADA

**JURY TRIAL DEMANDED**

**PUBLIC VERSION**

**DEFENDANT APPLE INC.'S MOTION FOR SUMMARY JUDGMENT  
OF NON-INFRINGEMENT AND INVALIDITY UNDER § 112**

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## I. INTRODUCTION

In its asserted patents, Koss has claimed far more than its inventors disclosed or enabled. And in this case, it has accused far more than even its improperly-broadened claims could plausibly cover. With discovery closed, the undisputed factual record shows that, as a result of these irredeemable defects in Koss' case, Apple is entitled to summary judgment on several grounds.<sup>1</sup>

First, Apple does not infringe asserted claims 3 and 44 of the '025 Patent or claims 1, 3, 4, 35, 37, 39, and 62 of the '934 Patent. Each of these claims requires transmission of requests to a server and requires that "the" same server then stream audio or transmit firmware updates to the headphones. But there is no genuine dispute of fact that the Apple servers Koss accuses of satisfying these two requirements are different and unrelated.

Second, the asserted claims of the '025, '934, '982, and '325 Patents ("the Headphone Patents") are invalid for lack of enablement. Each claim recites or includes Bluetooth headphones comprised of two wireless earphones that are not connected by a wire ("true wireless" Bluetooth). Although true wireless Bluetooth was undisputedly novel or nascent technology as of 2008, the specification provides no explanation at all of how to make it work. This lack of disclosure is fatal and cannot be filled by any inventor or expert testimony about what was known in the art.

Third, asserted claims across all four Headphone Patents are invalid for lack of written description support: all asserted claims of the '025 and '934 Patents, claims 8 and 10 of the '982 Patent, and claim 4 of the '325 Patent. Some of these claims require headphones to have a combination of features that is never described in any embodiment in the specification. Other claims recite inventions that are far broader in scope than what a person of skill would have

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<sup>1</sup> Currently, Koss asserts: U.S. Patent No. 10,206,025 (the '025 Patent) claims 3 and 44; U.S. Patent No. 10,469,934 (the '934 Patent) claims 1, 3, 4, 35, 37, 39, 61, and 62; U.S. Patent No. 10,491,982 (the '982 Patent) claims 1, 2, 8, and 10; U.S. Patent No. 10,506,325 (the '325 Patent) claims 4 and 7; and U.S. Patent No. 10,298,451 (the '451 Patent, not at issue here) claims 1 and 9.

understood the inventors to possess from reading the specification Koss filed in 2008 and 2009.

The facts on which Apple relies for these issues are undisputed. With discovery closed, Koss cannot raise a triable issue on these claims, and Apple should be granted summary judgment.

## **II. LEGAL STANDARD**

Summary judgment should be granted when “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56.

## **III. BACKGROUND**

In this case, Koss accuses Apple of infringing five patents. Four of these (the Headphone Patents at issue in these motions) share a common specification and are each titled “System with Wireless Earphones.” (Ex. 1, ’025 Pat.; Ex. 2 ’934 Pat.; Ex. 3, ’982 Pat.; Ex. 4, ’325 Pat.) As the title suggests, these patents claim wireless headphones with various shapes and components that can interact with a remote network server in specific ways, and that have certain “user controls.” (*Id.*) Koss accuses certain Apple and Beats headphones infringing these claims. (Dkt. No. 1 ¶¶ 79, 107, 121, 135.)

The shared specification of the Headphone Patents was filed in April 2009, with priority claimed to a provisional application filed in April 2008. (Exs. 1–4.) In 2016, Apple released its first generation AirPods. (Ex. 5, DEF-KOSS-PA\_00015312.) Following that release, Koss attempted to use those products as a roadmap for new claims it had never described or claimed before. To craft its new claims, Koss mixed-and-matched disclosures from separate, unrelated embodiments. Apparently recognizing that these claims still were not infringed, Koss then attempted to assert claim scope in this litigation that far exceeds what its specification discloses and contradicts what its claims plainly state. Koss has created a chasm between what its specification disclosed—that is, the invention the inventors purported to possess in 2008 and

2009—and what Koss now claims as its invention. This technological mismatch is at the core of Apple’s motions for partial summary judgment.

Both fact and expert discovery have now closed. (Dkt. No. 171) Koss has presented expert opinions from two technical experts—Mr. McAlexander, an engineer who opined regarding validity, and Dr. Clark, a cybersecurity expert who opined regarding infringement. (Ex. 6, McAlexander 4/1/22 Rebuttal Rpt. to Wiggins ¶ 5, Ex. A; Ex. 10, Clark 3/11/22 Opening Rpt. ¶¶ 3, 11–13) As set forth below, however, neither the opinions offered by these experts, nor any fact or documentary evidence provided by Koss, can raise a triable issue of fact on the infringement, written description, or enablement issues presented in this motion. The undisputed facts material to the disposition of each issue are set forth below.

#### IV. NONINFRINGEMENT OF “THE . . . SERVER” CLAIMS

Apple is entitled to summary judgment of noninfringement as to claims 3 and 44 of the ’025 Patent and claims 1, 3, 4, 35, 37, 39, and 62 of the ’934 Patent. These claims follow a common pattern. Each requires “*a* remote, network-connected server” that performs a first function—receive requests. Each then requires that “*the*” same server performs additional functions—stream audio content, transmit firmware upgrades, or both.<sup>2</sup> There is no genuine dispute of fact that Apple’s products do not work this way. Rather, Apple’s accused systems use (as Koss concedes) three *different* and independent servers: a Siri server for receiving requests, an Apple Music server for streaming audio, and a firmware server for transmitting what Koss identifies as “firmware upgrades.” The Court should therefore grant Apple’s motion for summary judgment.

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<sup>2</sup> The claims requiring that the server receiving requests be the same server that streams audio are claims 3 and 44 of the ’025 Patent and 3, 4, and 37 of the ’934 Patent. The claims requiring that the server receiving requests be the same server that transmit firmware upgrades are claims 1, 3, 4, 37, 39, and 62 of the ’934 Patent. Claims 3, 4, and 37 of the ’934 Patent require the server that receives requests to be the same server that *both* streams audio and transmits firmware upgrades.

**A. The Antecedent Basis Rule Requires the Claimed Servers to Be the Same**

It is black-letter law that a claim’s “use of the word ‘the’ indicates [the term] refers back to a previous limitation” for its “antecedent basis.” *VLSI Tech. LLC v. Intel Corp.*, No. A-19-CV-00977-ADA, 2021 WL 1432705, at \*8 (W.D. Tex. Feb. 25, 2021). Put another way, “[s]ubsequent use of the definite articles ‘the’ or ‘said’ in a claim refers back to the same term recited earlier.” *Hytera Comms. Co. Ltd. v. Motorola Solutions, Inc.*, 840 F. App’x 555, 559 (Fed. Cir. 2021). This usage may be defeated only in rare circumstances in which applying the same meaning across terms would be “facially nonsensical.” *Microprocessor Enhancement Corp. v. Texas Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008).

Both the Federal Circuit and this Court have consistently applied this rule. For example, in *Bicon, Inc. v. Straumann Co.*, the Federal Circuit held that a claim term, “‘the abutment’ . . . refers to the particular abutment described in the preamble of the claim, not to any structure that could conceivably serve as an abutment.” 441 F.3d 945, 954 (Fed. Cir. 2006). Likewise, in *VLSI*, this Court held that a reference to “the reduced power supply voltage” in a patent claim referred back to a previous limitation. 2021 WL 1432705, at \*8. Because “[t]he only term in the preceding limitations that can provide antecedent basis is ‘decrease the power supply voltage,’” these two terms must refer to the “same voltage.” *Id.* This Court then granted summary judgment of non-infringement because the plaintiff “point[ed] to two different voltages” and there did “not appear to be any evidence that they are the same voltage.” *Id.*

Here, the asserted claims’ use of antecedent basis to link multiple “servers” dooms two categories of claims—the “Audio-Streaming Claims” and the “Firmware-Transmitting Claims.”

<b>Audio-Streaming Claims</b>	<b>Firmware-Upgrade Claims</b>
<u>'025 Patent</u> : 3, 44	<u>'934 Patent</u> : 1, 3, 4, 37, 39, 62
<u>'934 Patent</u> : 3, 4, 37	



The Audio-Streaming Claims require, in relevant part: “*a* remote, network-connected server”; a processor for “initiating transmission of a request to *the* remote, network-connected server”; and “earphones [that] play audio content streamed from *the* remote, network-connected server.” (*E.g.*, Ex. 1, ’025 Pat. 18:18–42 (emphasis added).)

In these claims, based on the explicit antecedent basis relationship, the server that receives requests must be the same server that streams audio content. *VLSI*, 2021 WL 1432705, at \*8. Koss’ technical expert, Mr. McAlexander, agrees, stating repeatedly that these claims “require[] that the streamed audio content be from *the* server previously identified.” (Ex. 6 ¶¶ 164, 203, 251, 292, 368, 411, 460 (emphasis in original); *see* Ex. 7, McAlexander 4/28/22 Dep. 226:24–228:9.)

Further, Koss itself invoked the antecedent-basis rule to stave off an invalidity review of some of the Audio-Streaming Claims before the Patent Trial and Appeal Board. In an *inter partes* review involving the ’025 Patent, Koss argued to the PTAB that “*the* remote, network-connected server” must be the same server identified earlier in the claims. (Ex. 8, Prelim. Resp. at 27–28, *Apple Inc. v. Koss Corp.*, No. IPR2021-00546 (P.T.A.B. June 10, 2021), Paper No. 8 (emphasis in original).) The Board relied in part on Koss’ argument to deny institution, finding that “the same server introduced in claim 1 . . . also streams the audio content to the earphones.” (Ex. 9, 9/7/21 Decision Denying Institution at 15, *Apple Inc. v. Koss Corp.*, No. IPR2021-00546 (P.T.A.B.), Paper No. 10.) Koss cannot credibly take the opposite position before this Court.

Likewise, the Firmware-Upgrade Claims require, in relevant part: a processor configured to “initiate transmission of a request to *a* remote, network-connected server”; and a headphone assembly “for receiving firmware upgrades transmitted from *the* remote, network-connected server.” (*E.g.*, Ex. 2, ’934 Pat. 18:2–32 (emphasis added).)

Again, the antecedent basis rule requires that the server receiving requests must be the same

server transmitting firmware upgrades. *VLSI*, 2021 WL 1432705, at \*8. Indeed, Koss’ expert agrees that this element is *not* met when: “the network-connected server that is transmitting the firmware upgrades is not the same server to which [the headphone product] initiates transmission of the request.” (Ex. 6 ¶¶ 515–16; Ex. 7 at 234:6–235:1.)<sup>3</sup>

**B. Apple’s Accused Systems Use Three Different, Unrelated Servers to Perform the Claimed Functions**

The undisputed evidence establishes that the servers that Koss points to as accomplishing the three claimed functions—receiving requests, streaming audio, and providing firmware upgrades—are all different and distinct. According to Koss, Apple’s “Siri server” receives requests; the “Apple Music” server streams audio content; and an unnamed firmware upgrade server transmits firmware upgrades. (*See* Ex. 10 ¶¶ 172–74 (identifying only the Siri server for receiving requests); Ex. 11, Clark 4/19/22 Dep. 122:20–123:7 (same), *id.* at 141:9–13 (same); Ex. 12, Koss Final Inf. Contentions, Exs. A-1 at 33–37 and D-1 at 25–29 (same); Ex. 10 ¶¶ 198–204, 555–61 (identifying Apple Music server for streaming audio); Ex. 11 at 135:7–12 (agreeing he does not “describe streaming any audio other than audio from Apple Music”); Ex. 10 ¶¶ 525–28 (discussing firmware upgrade server).) Apple’s engineers, test results, and multiple experts all establish that these three servers are separate and do not communicate with one another.

*First*, the unchallenged testimony of Bart Fromm, [REDACTED]

[REDACTED]

[REDACTED]

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<sup>3</sup> Moreover, when Koss wanted to allow the servers that performed different functions in a claim to be different, it knew how to claim that—with the non-limiting article “a.” (*See* Ex. 3, ’982 Pat. cl. 7 (transmitting request to “a” server and receiving firmware from “a” server).) Koss’ choice not to use the non-limiting “a” language in the ’025 and ’934 Patents further confirms that the servers must be the same. *See X One, Inc. v. Uber Techs., Inc.*, 440 F. Supp. 3d 1019, 1036 (N.D. Cal. Feb. 12, 2020) (finding antecedent-basis presumption strengthened because, in another claim, “when the inventor refers to a second map, the inventor again use[d] the indefinite article ‘a.’”).

[REDACTED]

[REDACTED] In fact, the Siri and firmware servers must be different because [REDACTED]

[REDACTED] but the firmware servers do not. (*Id.* at 58:15–25.)

Mr. Fromm also testified, without contradiction, that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

*Second*, Apple’s experts—Dr. White and Mr. Wiggins—both provided unchallenged testimony to confirm that the accused servers are different. Dr. White first used network analysis software to determine the IP address (a form of network identifier) for each server. (Ex. 14, White 4/1/22 Rebuttal Rpt. ¶ 38; Ex. 15, Wiggins 4/1/22 Rebuttal Rpt. ¶ 81.) The results of Dr. White’s analysis showed the Siri, Apple Music, and firmware servers each had unique IP addresses, indicating that the servers were different. (*Id.* ¶¶ 42, 49, 77.)

To confirm this, Dr. White conducted a test in which he used a software application to block communications with each server in turn. Blocking access to the Siri server prevented the device from accessing the Siri server, but not from streaming music or receiving firmware updates. (*Id.* ¶¶ 45–48, 76; *see also* Ex. 16, White 4/22/22 Dep. 128:2–129:4.) Conversely, blocking the Apple Music and firmware servers prevented the device from streaming audio and receiving firmware updates, respectively, but had no impact on using Siri. (Ex. 14 ¶¶ 49–58, 77–84.) These

results confirmed that the servers were not only different but were not even working together to perform the accused functions. Dr. White and Mr. Wiggins concluded—based on these results, the testimony of Apple engineers, and their own experience in wireless communications—that the accused servers are different and therefore do not infringe. (Ex. 14, White 4/1/22 Rebuttal Rpt. ¶¶ 59, 85; Ex. 15, Wiggins 4/1/22 Rebuttal Rpt. ¶¶ 80–81.)

### C. Koss Does Not Even Attempt to Rebut Apple’s Evidence

Koss provides *no* evidence that could raise a dispute of fact on this issue. Koss’ infringement expert, Dr. Clark, was never even informed of the relevant legal standard:

Q. You haven’t been advised that where the word the appears as an antecedent to a claim element in a patent claim that element is presumed to refer to a prior recitation of the same element?

A. I have not been advised of that law.

(Ex. 11 at 128:14–18.) Far from attempting to explain how the accused servers could be the same, Dr. Clark insisted that it was his understanding that they need not be:

Q. And it is your opinion that the remote, network-connected server required by Claim 2 can be a different server than the one recited in Claim 1?

A. I -- I don’t see why not.

(*Id.* at 128:19–129:1; *see also id.* at 141:21–142:7.)

Dr. Clark concedes he made no attempt to determine, and offered no opinion on, whether “the Apple Music server is the same server as the Siri server.” (*Id.* at 132:4–8.) Nor could he, as he did not “perform any testing to attempt to identify the server from which music is streamed when using Apple Music.” (*Id.* at 135:3–6.) With respect to firmware updates, Dr. Clark did not attempt to identify—whether by IP address, physical location, name, or any other means—what server the updates came from. (*Id.* at 142:14–144:3.) Dr. Clark admitted that he “merely observed from the documentation that the firmware upgrades are”—very generally—“delivered from

Apple.” (*Id.* at 143:13–15.) Dr. Clark did not even attempt to opine that the firmware updates were or could be received from the server to which Siri requests were sent, as the claims require.

Beyond Dr. Clark, Koss does not cite any document, testimony, source code, or test suggesting that the Siri, Apple Music, and firmware servers are the same. This lack of evidence is fatal: each claim requires that “*the*” audio-streaming or firmware-transmitting server “refers to the particular [server] described in the [earlier limitation] of the claim,”—the Siri server—“not to any structure that could conceivably serve as [a server].” *Bicon*, 441 F.3d at 954.

Bereft of evidence to support its case, Koss appears to pin its hopes on a straw-man argument that “a remote, network-connected server” can mean “one or more” servers. But when “a” introduces a term involving a collection of items, that simply means that use of “the” in a subsequent limitation refers back to the entire collection. *See Harris Corp. v. Fed. Express Corp.*, 502 F. App’x 957, 963–64 (Fed. Cir. 2013) (requiring “the data” to encompass all data from prior limitation, not a subset); *Rubbermaid Inc. v. Ergotron, Inc.*, No. 3:12-cv-416-RJC-DSC, 2014 WL 940685, at \*8 (W.D.N.C. Mar. 11, 2014) (“[U]se of the definite article (‘the’) expressly refers back to the antecedent ‘at least one compartment’ . . . [and thus] must refer back to all compartments as a collective,” *i.e.*, “all of the one or more compartments”). Thus, the items that satisfy the subsequent limitation must be drawn from the collection that satisfies the initial limitation. *Howmedica Osteonics Corp. v. Wright Medical Tech., Inc.*, 540 F.3d 1337, 1343–44 (Fed. Cir. 2008) (interpreting “at least one condylar element” to mean “one or more,” and construing subsequent reference to “the condylar element” with a specific geometry to require “at least one” of those initial condylar elements to exhibit such geometry.)

Thus, even as Koss reads it, claim 1 of the ’934 Patent requires a processor configured to “initiate transmission of a request to [one or more] remote, network-connected server[s],” and

receive “firmware upgrades transmitted from the [one or more] remote, network-connected server[s].” But this does not mean—and what Apple is aware of no case suggesting—that one or more servers can be the request target and an entirely different set of one or more servers can provide upgrades. The antecedent-basis requirement holds regardless of whether each limitation is mapped to one server or many. *Harris*, 502 F. App’x at 963–64; *Rubbermaid Inc.*, 2014 WL 940685 at \*8. Here, Koss has no evidence that *any* Siri server—let alone multiple Siri servers—streams audio or hosts firmware updates. (*See, e.g.*, Ex. 11 at 138:12–18 (no “opinion to the effect that the Siri servers actually do stream or play audio”); *id.* at 150:18–151:5 (no assertions or “evidence that the Siri server stores or provides firmware updates”).) Further, Apple’s own expert, Dr. White, expressly opined that Apple did not infringe the “server” limitations under Koss’ favored “one or more” interpretation. (Ex. 16 at 128:2–129:4.)

Because there is no genuine issue of material fact that the accused Apple products do not “receiv[e] firmware upgrades transmitted from *the* remote, network-connected servers” and do not “play audio content streamed from *the* remote, network-connected server,” the Court should grant summary judgment of non-infringement for claims 3 and 44 of the ’025 Patent and claims 1, 3, 4, 35, 37, 39 and 62 of the ’934 Patent.

## **V. THE ASSERTED CLAIMS ARE INVALID FOR LACK OF ENABLEMENT**

Next, Apple is entitled to summary judgment that the asserted claims are invalid for lack of enablement under 35 U.S.C. § 112. As asserted by Koss, the claims require or include within their scope Bluetooth headphones comprised of two earphones that are not connected by a wire (“true wireless” Bluetooth). Koss and its expert contend that this true wireless aspect of the claimed invention was novel at the time of filing. But there is no genuine dispute of fact that the specification contains no enabling disclosure as to this functionality. Because the enabling disclosure for an allegedly novel aspect of the claims must come from the patent, not from the

knowledge of a person of skill, the asserted claims are invalid for lack of enablement.

To meet the enablement requirement of 35 U.S.C. § 112, “the specification of a patent must teach those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation.” *Trustees of Bos. Univ. v. Everlight Elecs. Co.*, 896 F.3d 1357, 1362 (Fed. Cir. 2018) (quotations omitted). As shown below, the asserted claims require or include true wireless Bluetooth technology within their scope. Indeed, Koss’ infringement allegations show that it believes its claims cover a true wireless Bluetooth embodiment. Because this technology was purportedly novel or nascent—that is, neither well-known nor routine—the specification must teach a person of skill how to make and use it without resorting to external knowledge or teachings. There is no genuine dispute of fact that the specification of Koss’ Headphone Patents fails this test.

**A. The Claims Require or Include True Wireless Bluetooth Headphones**

The sole independent claims of the ’982 and ’325 Patents each require, in relevant part, “headphones comprising a pair of first and second wireless earphones to be worn simultaneously by a user, wherein . . . the first and second earphones are not physically connected.” (Ex. 3, ’982 Pat. cl. 1; Ex. 4, ’325 Pat. cl. 1.) Claim 1 of the ’982 Patent further requires that the earphones receive digital audio “via Bluetooth wireless communication links.” (Ex. 3, ’982 Pat.) Claim 1 of the ’325 Patent, from which asserted claims 4 and 7 depend, requires the headphones to have “wireless communication” capability. (Ex. 4, ’325 Pat.) The claimed wireless communication in the ’325 Patent must include Bluetooth because claim 15, which depends from claim 1, requires the headphones to use Bluetooth. (Ex. 4, ’325 Pat. cls. 1, 15.) Thus, the claims of the ’982 and ’325 Patents all recite, or include within their scope, true wireless Bluetooth technology.

For their part, asserted claim 44 of the ’025 Patent and asserted claims 35, 37, and 39 of the ’934 Patent claim or include true wireless technology because they recite two independently wireless earphones, each with its own wireless circuit. (Ex. 1, ’025 Pat. cl. 44 (depending from

claim 40); Ex. 2, '934 Pat. cl. 35 (depending indirectly from claim 32); *see* Ex. 17, Pat. Owner Resp. at 38, *Apple Inc. v. Koss Corp.*, No. IPR2021-00592 (P.T.A.B. Nov. 17, 2021), Paper No. 17 (claims 35, 37, and 39 of the '934 Patent “recite [true wireless] earbuds”).) As these patents disclose, and Koss itself asserts, the wireless communication recited in the claims includes Bluetooth. (Ex. 1, '025 Pat. 4:54–59.) Because the specification must enable the “full scope of the claimed invention,” *Trustees of Bos. Univ.*, and because Koss itself asserts that a true wireless Bluetooth embodiment is within the scope of its claims, the specification must enable true wireless Bluetooth to enable these claims as well. 896 F.3d at 1364.

**B. True Wireless Bluetooth Is a Purportedly Novel Aspect of the Claimed Invention**

Although enablement is judged from the perspective of a person of skill in the art, “[i]t is the specification, not the knowledge of one skilled in the art, that must supply the novel aspects of an invention in order to constitute adequate enablement.” *Genentech, Inc. v. Novo Nordisk, A/S*, 108 F.3d 1361, 1366 (Fed. Cir. 1997). Koss concedes that, as of April 2008, there was no Bluetooth headphones in existence that implemented true wireless technology. (Ex. 18, Wiggins 3/11/22 Opening Rpt. ¶¶ 2151–53; Ex. 6, McAlexander 4/1/22 Rebuttal Rpt. to Wiggins ¶ 893; Ex. 19, McAlexander 4/29/22 Dep. 389:19–24.) Indeed, Koss’ expert, Mr. McAlexander, characterized the true wireless aspect of Koss’ claimed invention as “pioneering” and “novel.” (Ex. 6 ¶ 893; Ex. 19 at 337:2–8.) He further admitted that true wireless technology for headphones was neither routine nor well-known. (Ex. 19 at 337:7–339:6.) And while some printed art at the time referred to the concept of true wireless Bluetooth, this “nascent technology” was not sufficiently developed to absolve Koss of the need to provide “a ‘specific and useful teaching’” in its patent specification. *Chiron Corp. v. Genentech, Inc.*, 363 F.3d 1247, 1254 (Fed. Cir. 2004); *see also id.* (“The law requires an enabling disclosure for nascent technology because a person of ordinary skill in the art



has little or no knowledge independent from the patentee's instruction.”). Indeed, Koss characterized its invention in its Complaint as the “first ever true wireless headphones.” (Dkt. No. 1 at 13.) Thus, according to Koss itself, it considered the true wireless aspect of the claimed inventions to be novel as of April 2008, rather than routine or well-known.

### **C. The Specification Fails to Teach the Novel Aspect of True Wireless Bluetooth**

Because Koss contends that true wireless Bluetooth is a novel aspect of the claimed invention, the specification itself must teach a person of ordinary skill how to implement it without undue experimentation. *Auto. Techs. Int'l, Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1283 (Fed. Cir. 2007) (“[T]he novel aspect of an invention must be enabled in the patent.”). The Federal Circuit's decision in *Auto Techs.* is directly on point and dooms Koss' claims. In *Auto Techs.*, the claims at issue included within their scope “both mechanical side impact sensors and electronic side impact sensors.” 501 F.3d at 1282. It was undisputed that the use of electronic side impact sensors was a “novel aspect” of the claimed invention. *Id.* at 1283. Despite this, the specification contained “only one short paragraph and one figure relate[d] to an electronic sensor.” *Id.* at 1282. “Noticeably absent is any discussion . . . that would provide more detail on how the sensor operates.” *Id.* at 1283. Because the limited disclosure failed to provide an enabling teaching for the novel electronic side impact sensor, the Federal Circuit found, the defendant was entitled to summary judgment of invalidity for lack of enablement. *Id.* at 1285.

The specification of Koss' Headphone Patents has even less of an enabling disclosure than the specification in *Auto Techs.* Koss' specification refers to Bluetooth just a single time, and even then only as one wireless protocol in a laundry list of many: “When in range, the data source 20 may communicate with the earphone 10 via the ad hoc wireless network 24 using any suitable wireless communication protocol, including Wi-Fi (e.g., IEEE 802.11a/b/g/n), WiMAX (IEEE 802.16), Bluetooth, Zigbee, UWB, or any other suitable wireless communication protocol.” (Ex.

1, '025 Pat. 4:54–59.) Noticeably absent is any explanation or details on how a true wireless Bluetooth headphone could be made. As Apple’s expert confirmed, without contradiction, this single sentence conveys nothing about how to make and use Bluetooth technology in a true wireless environment. (Ex. 18 ¶ 2142.) Koss does not and cannot dispute this. Indeed, Koss previously argued to this Court that this single reference to Bluetooth does not even suggest that Bluetooth is suitable for true wireless headphones, let alone teach how to implement it. (3/10/22 Koss Opp’n to Apple Mot. for Leave to Amend Second Amended Answer and Counterclaims at 17, Dkt. No. 153.) Thus, this single statement provides even less of a teaching than the paragraph and figure held insufficient in *Auto Techs.* 501 F.3d at 1282.

Nor does the rest of the specification contain any enabling teaching on how to make true wireless Bluetooth headphones. At most, the specification suggests that in certain embodiments a “user may wear two discrete wireless earphones **10**: one in each ear.” (Ex. 1, '025 Pat. 3:45–46.) But this does not state that Bluetooth could be used in such embodiments, let alone how such a Bluetooth embodiment would operate. To the contrary, it is undisputed that Bluetooth as it existed when Koss’ Headphone Patents were filed did not support sending audio to two wireless earphones at the same time or allow for playback in such a system. (Ex. 18 ¶¶ 2115–17, 2137; Ex. 6 ¶¶ 950–51.) Even Koss’ expert admitted that “some modification” to the Bluetooth standard would have been needed for “sending audio to two wireless earphones without a wire connecting them.” (Ex. 19 at 374:23–12.) But nothing in the specification states what that modification would be or how a person of skill would implement it.

Mr. McAlexander implicitly concedes that a true wireless solution is not enabled by the specification. In his report, Mr. McAlexander suggests there was a “simple” solution to implement true wireless Bluetooth in 2008. (Ex. 6 ¶ 946.) Mr. McAlexander’s solution—for which he cites

no document, system, or prior experience—would require two Bluetooth transceivers in each earphone, with one earphone relaying audio from the source to the second earphone. (*Id.*) Critically, Mr. McAlexander cites *no portion of the specification* that discloses this idea or explains how to implement it. (*Id.*) Nor could he: the specification teaches earphones with only a single wireless transceiver and never suggests that a second transceiver should or could be used. (Ex. 1, '025 Pat. Fig. 3.) Even assuming Mr. McAlexander's "solution" could be made without undue experimentation—which Apple's expert disputes—it is irrelevant because the enabling teaching for the supposedly-novel idea of true wireless Bluetooth headphones must come from the specification, not Mr. McAlexander's speculation. *Genentech*, 108 F.3d at 1366.

As a further example, it is undisputed that, to make and use a true wireless Bluetooth headphone for its intended purpose of playing audio there must be some timing mechanism to ensure that the audio played back in the two earphones is not "something that's dissonant or disconnected." (Ex. 19 at 350:9–351:1; *see also* Ex. 6 ¶ 946; Ex. 18 ¶¶ 2138, 2144; Ex. 20, Decl. of Joseph C. McAlexander III, ¶ 66, *Apple Inc. v. Koss Corp.*, No. IPR2021-00592 (P.T.A.B. Nov. 17, 2021), Paper No. 2046 ("[W]ireless earbuds each receive independent data streams and, as such, *the design would need to account for latencies* between the two data streams." (emphasis added)).) Mr. McAlexander admits that his own idea for true wireless Bluetooth would still require a means for "managing the timing" of the audio. (Ex. 6 ¶ 946.) Although the parties agree that the timing issue must be addressed, the specification teaches nothing about how to solve it. (Ex. 18 ¶ 2144.)

This lack of teaching is fatal because, as the inventors admit, synchronizing audio between two unconnected earphones is [REDACTED]

[REDACTED] Koss' own expert did not and could

not point to any teaching in the specification for how to solve this problem; instead, he relied on knowledge he claimed a person of skill would supposedly have. (Ex. 19 at 349:24–350:4; *id.* at 350:9–351:1 (“The patent doesn’t have to talk about that. That’s common sense.”).) But that teaching must come from the specification rather than from a person of skill’s general knowledge. *Genentech*, 108 F.3d at 1366. As a result, and because managing the timing of playback is “required to make the claimed invention effective,” *Northpoint Tech., Ltd. v. MDS Am., Inc.*, the absence of any teaching on how to manage the timing in a true wireless Bluetooth system renders the claims invalid for lack of enablement. 413 F.3d 1301, 1310 (Fed. Cir. 2005) (affirming verdict of invalidity for lack of enablement); *see also Convolv, Inc. v. Compaq Computer Corp.*, 527 F. App’x 910, 930 (Fed. Cir. 2013) (affirming summary judgment of non-enablement for claims drawn to hard drives “because long seeks are a fundamental requirement for proper hard drive functionality,” even though “long seeks” were not expressly recited in the claims.)

The only meaningful effort Koss’ expert makes to point to any enabling disclosure is a cite to columns 16:53–17:6. (Ex. 6 ¶ 952.) But this portion has nothing to do with Bluetooth, or any form of wireless communication. Rather, it refers to generic “software” and “hardware,” stating that “it is clearly understood that artisans of ordinary skill would be able to design software and control hardware to implement the embodiments based on the present description with no more than reasonable effort and without undue experimentation.” (*Id.*) This is patent-lawyer boilerplate, not a technical teaching that would enable a person of skill in the art to make and use true wireless Bluetooth headphones. The only other portions of the specification that Koss’ expert cites in passing relate to irrelevant functions such as switching between networks (*id.* ¶ 968, citing ’025 Pat. 2:54–57), and a wireless network adapter (*id.* ¶ 970, citing ’025 Pat. 4:26–30). These citations are devoid of any teaching on how to implement true wireless Bluetooth headphones.

“[Koss] was required to provide an adequate enabling disclosure in the specification; it cannot simply rely on the knowledge of a person of ordinary skill to serve as a substitute for the missing information in the specification,” *ALZA Corp. v. Andrx Pharms., LLC*, 603 F.3d 935, 941 (Fed. Cir. 2010). The missing information here—how to use Bluetooth to send audio data to two wireless earphones at the same time—corresponds to the allegedly novel true wireless Bluetooth technology. The inventors did not disclose that information for the simple reason that they did not possess it: they [REDACTED]

[REDACTED]; *cf. Auto. Techs.*, 501 F.3d at 1284 (“Inventor Breed admitted that he had never built an electronic sensor for side impact.”).

The specification thus fails to provide an enabling disclosure for true wireless Bluetooth. No matter what expert or inventor testimony Koss tries to offer, it cannot, as a matter of law, make up for that gap. Thus, the Court should grant summary judgment of invalidity for lack of enablement as to claims 1, 2, 8, and 10 of the ’982 Patent, claims 4 and 7 of the ’325 Patent, claim 44 of the ’025 Patent, and claims 35, 37, and 39 of the ’934 Patent.

**D. Other Asserted Claims Also Include True Wireless Bluetooth Within Their Scope and Are Similarly Invalid**

Several other asserted claims of the ’025 and ’934 Patents do not explicitly recite “true wireless” headphones, but include this subject matter within their scope. They are therefore similarly invalid for lack of enablement. As described below, these claims are claim 3 of the ’025 Patent and claims 1, 3, 4, 61, and 62 of the ’934 Patent.

For the ’025 Patent, claim 44 is directed to a true wireless embodiment. *See* Section V-A, above. Claim 44 ultimately depends from claim 1, and thus claim 1 must include a true wireless embodiment within its scope as a matter of law. *See ABS Glob., Inc. v. Inguran, LLC*, 914 F.3d

1054, 1074 (7th Cir. 2019) (“If the specification failed to enable [a] . . . dependent claim, then . . . the full scope of the invention is also not enabled in the independent claim, and both claims are invalid for non-enablement.”). Asserted claim 3, in turn, depends from claim 1 and does not exclude this true wireless embodiment. Indeed, Koss asserts claim 3 against true wireless Bluetooth products, indicating that this embodiment is within the scope as Koss asserts. Thus, claim 3 also includes true wireless Bluetooth technology and is invalid for lack of enablement.

For the ’934 Patent, claims 35, 37, and 39 are expressly directed to a true wireless embodiment. *See* Section V-A, above. These claims ultimately depend from claim 1, and thus claim 1 must include a true wireless embodiment within its scope. *See ABS Glob.*, 914 F.3d at 1074. Asserted claims 3 and 4, in turn, depend from claim 1 and do not exclude a true wireless embodiment. Thus, asserted claims 1, 3, and 4 of the ’934 Patent include within their scope true wireless Bluetooth technology and are similarly invalid for lack of enablement. Further, asserted claims 61 and 62 recite “first and second earphones” and “ad hoc wireless communication,” and Koss asserts that a true wireless Bluetooth embodiment is within the scope of these claims as well. Thus, asserted claims 61 and 62 of the ’934 are similarly invalid.

## **VI. THE ASSERTED CLAIMS ARE INVALID FOR LACK OF WRITTEN DESCRIPTION**

Summary judgment of invalidity for lack of written description is appropriate on two main grounds. First, several asserted claims recite combinations of “claim elements . . . that are never linked together in the specification.” *Flash-Control, LLC v. Intel Corp.*, No. 2020-2141, 2021 WL 2944592, at \*4 (Fed. Cir. July 14, 2021). Thus, as a matter of law, the specification fails to “present each claim as an integrated whole.” *Id.* at \*3 (quotations omitted). Second, Koss asserts “claim scope [that is] far greater than what a person of skill in the art would understand the inventor[s] to possess,” and far beyond what is described in the specification. *LizardTech, Inc. v. Earth Res.*

*Mapping, Inc.*, 424 F.3d 1336, 1346 (Fed. Cir. 2005). Here, Koss asserts that its claims include the use of voice to control a headphone. But the specification and Apple’s unrebutted expert testimony show that the specification never suggested that the inventors possessed this novel feature as their invention. Because, to satisfy the written-description requirement, a specification must allow a person of skill in the art to “visualize or recognize” that the inventors possessed the broad invention later claimed, Koss’ claims are invalid. *D Three Enters., LLC v. SunModo Corp.*, 890 F.3d 1042, 1047 (Fed. Cir. 2018). Summary judgment is thus appropriate.

#### **A. Legal Standard**

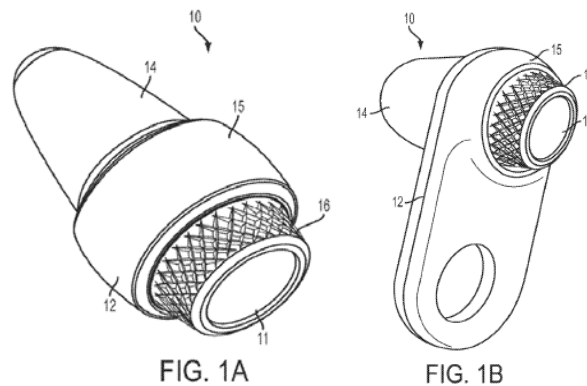
Under 35 U.S.C. § 112, a patent specification “shall contain a written description of the invention.” This requirement “is satisfied only if the inventor conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention, and demonstrates that by disclosure in the specification of the patent.” *Nuvo Pharms. (Ireland) Designated Activity Co. v. Dr. Reddy’s Lab’s Inc.*, 923 F.3d 1368, 1376 (Fed. Cir. 2019) (quotations omitted). “[T]he purpose of the written description requirement is to prevent an applicant from later asserting that he invented that which he did not, and the requirement is particularly important when, as here, claims are added later during prosecution in response to development by others.” *Quake v. Lo*, 928 F.3d 1365, 1373 (Fed. Cir. 2019) (quotations omitted).

Analyzing written description “requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art.” *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). Although written description is a question of fact, the only relevant evidence is the four corners of the specification, as understood by a person of skill given the state of the art. *See id.* at 1351–52.

#### **B. There Is No Written Description Support for the Claimed Combination of a “Body Portion That Sits at Least Partially in an Ear of the User” and “Activation of a Microphone by the User”**

Claim 44 of the '025 Patent and claims 37 and 39 of the '934 Patent each recite earphones that (1) include “a body portion that sits at least partially in an ear of the user”<sup>4</sup> *and* (2) allow “activation of the microphone by the user.”<sup>5</sup> However, each claim element is found in separate and distinct embodiments that describe headphones with different shapes, and functionalities. These elements are never linked together in the specification as filed in 2008 and 2009, and thus the claims reciting this combination of elements fail for lack of written description.

The specification’s sole disclosure of a headphone with a “body portion that sits at least partially in an ear of the user” is in the earbud-type embodiments shown in Figs. 1A and 1B:



The embodiments of Figs. 1A and 1B, however, are not described as including any means for “activation of the microphone by the user.” Rather, as disclosed in the specification, these embodiments have only two user interface elements: (1) a “knob **16** . . . for adjusting the shape of the ear canal portion,” (Ex. 1, '025 Pat. 3:20–23), and (2) a “button **11**” that, when pushed, sends pre-defined communications to a server. (*Id.* at 8:27–41, 11:62–12:30, 12:55–60.)

In contrast, the only disclosures of headphones that allow “activation of the microphone by the user” are found at columns 12:64–13:17. This disclosure describes a “button **92**” that the user

<sup>4</sup> This limitation is found in claim 40 of the '025 Patent, from which claim 44 depends. Similarly, this limitation is found in claim 34 of the '934 Patent, from which claims 37 and 39 each depend.

<sup>5</sup> This limitation is found in claim 43 of the '025 Patent, from which claim 44 depends.



pushes to “activate the microphone.” (*Id.* at 13:4–5.) But this disclosure is in the context of an embodiment that has an over-the-ear band and lacks an in-ear portion, as shown in Fig. 9:

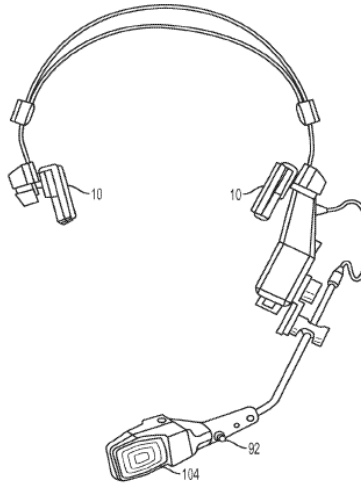


FIG. 9

Unlike the embodiments of Figs. 1A and 1B, the embodiment of Fig. 9 has a large microphone boom containing the “button” for “activation of a microphone.” (*Id.* at 13:4–5, Fig. 9.) Importantly, the specification does not describe any means for activating a microphone in the form factor of Fig. 1B, which has neither a microphone button, an extended piece that could hold such a button, nor any obvious way of incorporating the large “boom” from Figure 9 into its small “earbuds.”

Further, the unrebutted expert testimony establishes that a person of skill reading the specifications filed in April 2008 and April 2009 would know that the embodiments of Figs. 1A and 1B and the embodiment of Fig. 9 have a “very different form factor and user-interface setup.” (Ex. 18, Wiggins 3/11/22 Opening Rpt., ¶ 2263.) The person of skill would further find nothing in the specification to show that the inventors possessed an invention that merged “these [] very different form factors with different UI elements.” (*Id.*) For example, the specification contains no disclosure of how a microphone would be activated in Fig. 1’s earphone embodiment, or where the activation means would be placed. (*Id.*)

Koss' claims are on all fours with those that this Court invalidated for lack of written description in *Flash-Control, LLC v. Intel Corp.*, No. 1:19-CV-01107-ADA, 2020 WL 4561591 (W.D. Tex. July 21, 2020). In *Flash-Control*, the patentee "incorrectly attempt[ed]" to show written description support for its claims by combining disclosures from different embodiments. *Id.* at \*8. Not only did the patentee "incorrectly mix[]-and-match[] citations to different embodiments," it failed to "explain how a POSITA would know to combine [the embodiments], let alone how to combine them." *Id.* Koss' claims suffer from the same problem. The specification describes different headphones with "very different form factor[s] and user-interface[s]," which are used to perform different functions and provide different functionality. (Ex. 18 ¶ 2263.) One of these embodiments discloses the claimed "portion that sits at least partially in an ear"; another discloses "activation of the microphone by the user." But the specification never discloses an invention that includes both elements "as an integrated whole." *See Novozymes A/S v. DuPont Nutrition Biosciences APS*, 723 F.3d 1336, 1349 (Fed. Cir. 2013).

Koss has offered no evidence that could create a triable issue of fact here. Koss' only expert to address written description, Mr. McAlexander, admitted that in attempting to identify written description support for all claims, he plucked disclosures from "any combination" of unrelated embodiments. (Ex. 6, McAlexander 4/1/22 Rebuttal Rpt. to Wiggins ¶ 57 (relying on "any combination" of words and figures); Ex. 19, McAlexander 4/29/22 Dep. 430:6–11.) Further, he did so without offering any opinion or explanation as to whether or why a person of skill would have understood those embodiments to be linked. (*Id.* at 426:9–22.) Thus, Koss has no evidence that could create a genuine dispute of fact regarding the failure of the specification to disclose the claimed combination of elements as an "integrated whole," as the law requires. *See Flash-Control*, 2021 WL 2944592, at \*4. Summary judgment that claim 44 of the '025 Patent and claims 37 and

39 of the '934 Patent are invalid is therefore appropriate. *See id.*

**C. There Is No Written Description Support for the Claimed Combination of “True Wireless,” Bluetooth, and “Transitioning . . . Based On, at Least in Part, a Signal Strength”**

Claims 8 and 10 of the '982 Patent each require earphones that “transition to play digital audio content received wirelessly from [a] second digital audio source . . . based on, at least in part, a signal strength for [a] second wireless communication link.”<sup>6</sup> The claims further require that these earphones (1) communicate using Bluetooth, and (2) use a true wireless form factor where the two earphones “are not physically connected.” But the specification does not describe any earphones that can transition between sources based on signal strength in either a Bluetooth embodiment or in a true wireless embodiment, let alone in a true wireless Bluetooth embodiment. Because the specification fails to convey that the inventors possessed the claimed combination of elements in claims 8 and 10 “as an integrated whole rather than as a collection of independent limitations,” summary judgment is appropriate. *Novozymes*, 723 F.3d at 1349.

To begin, headphones that both use Bluetooth and transition to a second audio source based on signal strength are not disclosed in the specification as filed. The only headphones the specification describes as transitioning between sources relate to a particular embodiment that uses 802.11, or “Wi-Fi,” rather than Bluetooth. (Ex. 1, '025 Pat. 4:59–5:67 (describing transition using “Wi-Fi protocol,” with reference to infrastructure networks).) Further, the unrebutted expert testimony demonstrates that a person of skill would not have linked this Wi-Fi “transitioning” disclosure to a Bluetooth embodiment. Unlike Wi-Fi, Bluetooth disallowed the use of signal strength for switching between sources as a matter of design. (Ex. 18 ¶¶ 2200–01 (citing Section 3.4.1.2 of the Core Specification of Bluetooth to show that “use of signal strength to switch

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<sup>6</sup> The first two elements are required by claim 1 of the '982 Patent; the third element is required by claim 6. Claims 8 and 10 depend from claims 1 and 6 and thus require all three elements.

between Bluetooth connections is expressly denied”); *see also id.* at 2208–11.) Koss’ expert offered no opinions to contest any of this and did not dispute the state of the Bluetooth standard as of April 2008. (*See* Ex. 6 ¶ 995.) As a result, the undisputed evidence shows that a person of skill could not conclude from a disclosure of transitioning based on signal strength in a “Wi-Fi” embodiment that the inventors possessed an invention for transitioning in a Bluetooth embodiment.

Similarly, the specification as filed in April 2008 and April 2009 fails to disclose true wireless headphones that transition between sources based on signal strength. The only disclosure in the specification of transitioning based on signal strength is in the context of an embodiment that used only a single earphone. (Ex. 1, ’025 Pat. 4:54–5:25; 15:24–34.) The only disclosure of a user wearing “two discrete wireless earphones **10**: one in each ear” relates to a separate embodiment. (*Id.* at 3:45–46.) Absent from the specification is a disclosure of two wireless earphones that are “not physically connected” and that transition to a second source based on signal strength, as the claims require. This absence is key because a disclosure of transitioning between sources in a single-earphone embodiment does not convey that the inventors possessed the idea of transitioning in the admittedly “much more complex” case of a pair of unconnected headphones—a use case that would require overcoming new technical challenges such as reconciling the differing signal strengths the two earphones would measure and synchronizing the transitioning. (Ex. 18 ¶¶ 2257–58.)

Lastly, the specification fails to convey possession of an invention combining all three of Bluetooth, true wireless, and transitioning between sources. The specification references Bluetooth only once, as one in a list of several protocols that could be used by an audio source. (Ex. 1, ’025 Pat. 4:54–59.) Then, in a separate discussion, the specification refers to the possibility that “the user may wear two discrete wireless earphones **10**: one in each ear.” (*Id.* at 3:45–46.) And,

elsewhere, the specification describes transitioning between sources of audio in a Wi-Fi embodiment. (*Id.* at 10:4–35.) Missing from the specification are “any ‘blaze marks’ that would lead an ordinarily skilled investigator toward” the conclusion that the inventors disclosed or possessed the headphones that used Bluetooth, were true wireless, and could transition between sources, as Koss later claimed.<sup>7</sup> *Novozymes*, 723 F.3d at 1439. There is no evidence that a person of skill reading the specification in April 2008 or April 2009, without “foreknowledge” of the claims Koss wrote a decade later, could not have made their way through the “forest” of disclosures to conclude that the inventors possessed the invention recited in claims 8 and 10. *Id.*

Koss’ expert, Mr. McAlexander, provides no opinions that could stave off summary judgment. The entirety of Mr. McAlexander’s written-description opinion is a chart identifying citations from different embodiments. Mr. McAlexander offers no explanation as to whether or why a person of skill would have viewed the citations together, and he admitted at his deposition he had no further explanation to provide. (Ex. 6 ¶ 57 (relying on “any combination” of words and figures); Ex. 19 at 430:6–11.) As one example of the impropriety of Mr. McAlexander’s approach, his chart repeatedly points to Figures 1C and 9 for multiple limitations recited in claims 8 and 10 of the ’982 Patent. (Ex. 6 at 282, 285, 286.) But these figures depict earphones with a wire or headband connecting them, rather than earphones that are “not physically connected,” as the claims require. Mr. McAlexander makes no attempt to explain otherwise.

Koss and its expert improperly “mixed-and-matched citations to different embodiments” and failed to “explain how a POSITA would know to combine” them. *Flash-Control*, 2020 WL 4561591, at \*8. Based on the specification and Apple’s unrebutted expert testimony, there is no

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<sup>7</sup> This lack of disclosure cannot be filled by background knowledge in the art. Koss’ expert could not identify, as of the April 2008 filing date, any true wireless Bluetooth headphone that could transition between sources based on signal strength. (Ex. 19 at 416:13–17.)

dispute of material fact, and Apple is entitled to summary judgment that claims 8 and 10 of the '982 Patent are invalid for lack of written description.

**D. There Is No Written Description Support for “Upon Activation of a User Control, Initiate Transmission of a Request” to a Remote Server**

Claims 3 and 44 of the '025 Patent, claims 1, 3, 4, 35, 37, 39, 61, and 62 of the '934 Patent, claims 8 and 10 of the '982 Patent, and claim 4 of the '325 Patent, all require “upon activation of a user-control of the headphone assembly, initiating transmission of a request” to a remote server. Koss asserts that the term “user control” is broad enough to include a non-physical means, such a voice trigger. (Ex. 10, Clark 3/11/22 Opening Rpt. ¶ 172) (mapping the use of the phrase “Hey Siri” to the claimed “user control.”) As Koss’ own experts admit, however, the specification never describes any use of voice as a “user control.” (*See* Ex. 11, Clark 4/19/22 Dep. 157:2–8.) Instead, the specification describes a far narrower invention that uses only a physical element, such as a button or dial, as a “user control.” (*See* Ex. 1, '025 Pat. 3:20–23; 8:27–36; 14:51–54.) The un rebutted expert testimony shows that these disclosures do not describe or show possession of the claimed invention as Koss now interprets it. There is therefore no genuine dispute of fact, and the Court should grant Apple summary judgment of invalidity for lack of written description.

A person of skill reading the Headphone Patents could not reasonably conclude that “the inventor[s] had possession of the claimed subject matter as of the filing date.” *D Three*, 890 F.3d at 1047 (quotations omitted). This is because the specification discloses only a physical “user control,” and does not convey possession of the use of speech or a voice trigger to control the headphones. The specification uniformly describes the “user control” as a known class of simple elements that a user can physically manipulate, such as switches, buttons, levers, dials, and knobs. (*See* Ex. 1, '025 Pat. 3:20–23 (“The exterior portion **15** may comprise a knob **16** or some other user control (such as a dial, a pressure-activated switch, lever, etc.)”); 8:27–36 (referring to button

11); 14:51–54 (“In addition, the earphone **10** may comprise a user control, such as button **11**, dial, pressure switch, or other type of user control . . .”).<sup>8</sup> It is undisputed that these physical elements are a known, recognizable class of controls and would not include or convey possession of a non-physical control in the form of a voice trigger—a far more complex form of interaction. (Ex. 18, Wiggins Rpt. ¶¶ 2243–45.) For example, headphone processors at the time could easily respond to button presses, but could not efficiently parse a spoken word so as to initiate transmission of a request. (*Id.* ¶ 2246.) In fact, the specification’s only disclosures regarding a user’s voice relate to transmitting voice between headphone, in which the voice does not “activate” any part of a headphone. (Ex. 1, ’025 Pat. 13:4–17; Wiggins Rpt. ¶¶ 2247–48.))

The Federal Circuit’s decision in *D Three* is controlling here. 890 F.3d 1042. In *D Three*, the specification disclosed a “washerless assembly” for a roof mount and described only one specific type of “attachment bracket” for use in that assembly. *Id.* at 1050. In litigation, the patentee argued that the claimed “attachment bracket” included “other types of attachment brackets” beyond the type the patents described. *Id.* But because these “other types” were never described or suggested, and the patentee’s expert “did not specifically address *why*” the specification’s disclosure would include them, the Federal Circuit held that the specification failed to provide written description and affirmed summary judgment. *Id.* at 1051 (emphasis in original).

As in *D Three*, neither of Koss’ technical experts here addressed why or how the specification disclosed a type of “user control” other than the one actually described (a physical control such as a button, switch, lever, etc.). Koss’ infringement expert, Dr. Clark, admitted he could not identify any disclosure of a “voice trigger or spoken word” as a “user control.” (Ex. 11,

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<sup>8</sup> Apple’s expert confirmed that a person of skill as of 2008 would not have viewed disclosures of physical controls like buttons and levers as indicating possession of non-physical controls like a voice trigger. (Ex. 18 ¶¶ 2243–45.) Koss disclosed no expert opinion in rebuttal.

Clark 4/19/22 Dep. 157:2–8.) Similarly, although Koss’ expert Mr. McAlexander pointed to a handful of unexplained cites, they disclose only physical elements, i.e., buttons, switches, knobs, etc. (Ex. 6 at 270, citing ’025 Pat. 8:5–41, 11:62–12:26, 12:41–63, 13:4–17, 14:40–57.) Mr. McAlexander provided no analysis or argument that they disclosed or showed possession of “voice activation” technology. (Ex. 19 at 436:10–13.) Although Mr. McAlexander asserted that the claims had written description support, his conclusion is based solely on the unexplained citations to physical controls in his chart. At best, Koss presented “[c]onclusory expert assertions” that “do not give rise to a genuine issue of material fact.” *D Three*, 890 F.3d at 1051; *compare with Dropbox, Inc. v. Motion Offense, LLC*, No. 6:20-CV-251-ADA, 2022 WL 174519, at \*7 & n.3 (W.D. Tex. Jan. 18, 2022) (genuine dispute of fact where expert provided non-conclusory opinions).

Importantly, the mere fact that the specification uses the term “user control” is not sufficient to satisfy the written description requirement: “[G]eneric claim language appearing *in ipso verbis* in the original specification does not satisfy the written description requirement if it fails to support the scope of the genus claimed.” *Ariad Pharms.*, 598 F.3d at 1350. Here, the scope of the genus as claimed is a “user control” comprising either a physical control means or a non-physical means, such as voice control. But, per the specification, the inventors possessed only the former, not the latter.

Nor can the missing disclosure of a “user control” as a voice trigger be substituted by reference to knowledge in the art. Such knowledge can only supply “details [that] were known to skilled artisans and not part of the inventors’ inventive contribution.” *Centrak, Inc. v. Sonitor Techs., Inc.*, 915 F.3d 1360, 1369 (Fed. Cir. 2019). Here, the un rebutted testimony shows that the details of implementing voice as an activation mechanism was not known to skilled artisans as of



the April 2008 filing date. (Ex. 18 ¶ 2246.)

The specification, in combination with Apple’s un rebutted expert evidence, establishes that the Headphone Patents fail to describe or disclose to a person of skill in the art that the inventors possessed a “user control” that included a voice-trigger. *See LizardTech*, 424 F.3d at 1345–46. Thus, the asserted claims that recite this “user control” are invalid for lack of written description.

## **VII. CONCLUSION**

For the foregoing reasons, Apple respectfully requests the Court grant its motions for partial summary judgment that: (1) Apple does not infringe claims 3 and 44 of the ’025 Patent or claims 1, 3, 4, 35, 37, 39, and 62 of the ’934 Patent; (2) all asserted claims of the Headphone Patents are invalid under § 112 for lack of enablement; and (3) claims 3 and 44 of the ’025 Patent, claims 1, 3, 4, 35, 37, 39, 61 and 62 of the ’934 Patent, claims 8 and 10 of the ’982 Patent, and claim 4 of the ’325 Patent are invalid under § 112 for lack of written description.

Date: May 13, 2022

Respectfully submitted,

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**PROOF OF SERVICE**

The undersigned hereby certifies that a true and correct copy of **DEFENDANT APPLE INC.'S MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT AND INVALIDITY UNDER § 112** has been served on May 13, 2022, to all counsel of record who are deemed to have consented to electronic service.

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